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| APPLICATION NO.            | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|----------------------------|----------------|----------------------|-------------------------|------------------|
| 10/006,790                 | 12/04/2001     | Tomoaki Masuda       | 04558/059001            | 9906             |
| 7.                         | 590 03/13/2003 |                      |                         |                  |
| ROSENTHAL & OSHA L.L.P.    |                |                      | EXAMINER                |                  |
| Suite 2800<br>1221 McKinne | у              |                      | DI GRAZIO, JEANNE A     |                  |
| Houston, TX 77010          |                | 1                    | ART UNIT                | DARED MILLIONS   |
|                            |                |                      | ARTUNII                 | PAPER NUMBER     |
|                            |                |                      | 2871                    |                  |
|                            |                |                      | DATE MAILED: 03/13/2003 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| 3 1 1  | Application No.   | Applicant(s)   |             |  |  |
|--|---|--|-------------|--|--|
|  | 10/006,790  | MASUDA ET AL.  | /           |  |  |
| Office Action Summary  | Examiner  | Art Unit   |             |  |  |
|  | Jeanne A. Di Grazio   | 2871   |             |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | pears on the cover sheet with   | h the correspondence addres  | is          |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply within the statutory minimum of thirty will apply and will expire SIX (6) MONT a cause the application to become ABA | oly be timely filed  (30) days will be considered timely.  HS from the mailing date of this commu  NDONED (35 U.S.C. § 133). | nication.   |  |  |
| Status   |   |  |             |  |  |
| 1) Responsive to communication(s) filed on   |   |  |             |  |  |
| ,  | nis action is non-final.  | ana anno antion an to the m  | orita io    |  |  |
| 3) Since this application is in condition for allow<br>closed in accordance with the practice under<br>Disposition of Claims   | ance except for formal matt<br>Ex parte Quayle, 1935 C.D  | ers, prosecution as to the m<br>. 11, 453 O.G. 213.  | ents is     |  |  |
| 4)⊠ Claim(s) <u>1-14</u> is/are pending in the application   | ٦.  |  |             |  |  |
| 4a) Of the above claim(s) is/are withdra   |   |  |             |  |  |
| 5) Claim(s) is/are allowed.  |   |  |             |  |  |
| 6)⊠ Claim(s) <u>1-14</u> is/are rejected.  |   |  |             |  |  |
| 7) Claim(s) is/are objected to.  |   |  |             |  |  |
| 8) Claim(s) are subject to restriction and/o   | or election requirement.  |  |             |  |  |
| 9) The specification is objected to by the Examine   | er.   |  |             |  |  |
| 10) The drawing(s) filed on is/are: a) acce  |   | e Examiner.  |             |  |  |
| Applicant may not request that any objection to the  |   |  |             |  |  |
| 11) The proposed drawing correction filed on   | _ is: a) ☐ approved b) ☐ di   | sapproved by the Examiner.   |             |  |  |
| If approved, corrected drawings are required in re   | ply to this Office action.  |  |             |  |  |
| 12) The oath or declaration is objected to by the Ex   | kaminer.  |  |             |  |  |
| Priority under 35 U.S.C. §§ 119 and 120  |   |  |             |  |  |
| 13) Acknowledgment is made of a claim for foreig   | n priority under 35 U.S.C. §  | 119(a)-(d) or (f).   |             |  |  |
| a) ☐ All b) ☐ Some * c) ☒ None of:   |   |  |             |  |  |
| 1. Certified copies of the priority documen  | ts have been received.  |  |             |  |  |
| 2. Certified copies of the priority documen  | 2. Certified copies of the priority documents have been received in Application No  |  |             |  |  |
| <ul> <li>3. Copies of the certified copies of the price application from the International But See the attached detailed Office action for a list</li> </ul>   | ureau (PCT Rule 17.2(a)).   |  | ge          |  |  |
| 14) Acknowledgment is made of a claim for domest   | ic priority under 35 U.S.C. §   | 119(e) (to a provisional app   | plication). |  |  |
| <ul> <li>a)    The translation of the foreign language pr</li> <li>15)    Acknowledgment is made of a claim for domes</li> </ul>   |   |  |             |  |  |
| Attachment(s)  |   |  |             |  |  |
| <ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4</li> </ol>   | 5) Notice of Ir   | ummary (PTO-413) Paper No(s)<br>Iformal Patent Application (PTO-15   |             |  |  |

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#### **DETAILED ACTION**

### **Priority**

Priority to Japanese Patent Application No. 2000-168054 is claimed.

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on May 6, 2000. It is noted, however, that applicant has not filed a certified copy of the foreign application as required by 35 U.S.C. 119(b).

# Revocation of Power of Attorney and New Appointment

Revocation of power of attorney and new appointment is noted and has been updated.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1, 2, 6, 8, 9, 10, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al. (US '904 B1) in view of Miyoshi Isamu (JP 09-151627).

Per claims 1 and 10: Yamaoka has an optical compensating film (Col. 2, Line 59), a transparent film base in the optically compensatory film provided to act as an adhesive layer (Col. 3, Lines 9-11), where the adhesive is coated (Col. 5, Lines 46-56), and the transparent (adhesive) film is made of norbornene (Col. 3, Lines 60-67 and Col. 4, Lines 1-9). From the teachings of Yamaoka, the method steps of claim 10 follow. Yamaoka does not appear to specify an adhesive layer having an adhesive force of 10 N/20mm; however, Isamu does have an adhesive force of 10.0 N/20mm (PAJ). It would have been obvious to one of ordinary skill in the

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art at the time the invention was made to modify Yamaoka in view of Isamu to prevent rising (peeling) of an adhesive layer from its base and to prevent warping of a base.

Per claim 2: Yamaoka has a separator (treated with a releasant) temporarily bonded to the adhesive layer which acts as a surface treatment (Col. 6, Lines 7-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to surface treat the transparent film base (norbornene film) and to then provide onto the norbornene film an adhesive layer for the following reason: to prevent lowering of the adhesive force due to contamination until the adhesive layer can be suitably bonded (Yamaoka, Col. 6, Lines 7-13).

Per claims 6 and 13: Yamaoka recites an adhesive layer having a thickness within the range of 1  $\mu$ m to 500  $\mu$ m (Col. 5, Lines 57-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have an adhesive layer within the range of from 20  $\mu$ m to 200  $\mu$ m depending upon the adhesive force (Col. 5, Lines 57-62).

Per claim 8: Claim 8 recites the elements of claim 1 with the addition of the optical compensating film adhered to a polarizing plate via an adhesive layer. Yamaoka has an optically compensatory film and polarizing plate bonded to each other by an adhesive layer (Col. 5, Lines 32-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a polarizing plate and optical compensating film adhered to each other by an adhesive layer with the recited elements of claims 1 and 8 for birefringence characteristics hardly changed by heat and humidity and light weight per unit area (Yamaoka, Col. 1, Lines 40-45).

Per claim 9: Claim 9 recites the elements of claims 1 and 8 with the addition of an LCD using such an optical compensating film or polarizing plate. Yamaoka has an LCD that incorporates the compensatory film and plate. It would have been obvious to one of ordinary

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skill in the art at the time the invention was made to have an LCD incorporating the elements as noted for a device of reduced weight and that can withstand external stimuli such as heat and humidity as noted in Yamaoka throughout.

2. Claims 3, 4, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al. (US '904 B1) and Miyoshi Isamu (JP 09-151627) in view of Arimoto et al. ('714 B2).

Per claims 3, 4, and 11: Yamaoka does not appear to specify a corona discharge treatment and a discharge frequency in the range of from 50 Hz to 500 kHz and a discharge amount in the range of from 0.001 kV \* A min/m2 to 5kV \* A min/m2; however, Arimoto specifically teaches that the discharge frequency is preferably 50 to 50,000 kHz with a treatment intensity of 0.01 to 5kV \* A min/m2 (Col. 18, Lines 1-5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yamaoka in view of Arimoto because the frequency range is a common range within which to perform a corona discharge treatment (See Arimoto's list of cited Japanese patents at Cols. 17 and 18, Lines 66-67 and Line 1) and because the treatment intensity as recited improves surface wettability (Col. 18, Lines 3-5).

3. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al. (US '904 B1) and Miyoshi Isamu (JP 09-151627) in view of Pekko (US '370).

Per claims 5 and 12: Yamaoka does not appear to have an adhesive of an acrylic adhesive, however, Pekko has a pressure sensitive acrylic adhesive (Col. 4, Lines 20-26). It would have been obvious to one of ordinary skill in the art at the time the invention was made to

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modify Yamaoka in view of Pekko to choose an acrylic adhesive that provides a secure and preferably permanent bond (Pekko, Col. 4, Lines 25-26).

4. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al. (US '904 B1) and Miyoshi Isamu (JP 09-151627) in view of Hani et al. (JP WO 92/22002).

Per claims 7 and 14: Yamaoka does not appear to specify a stretching ratio of a norbornene film ranging from 1.01 to 10 times; however, Hani has a norbornene resin sheet stretched from 1.1 to 8 times (see Hani). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yamaoka in view of Hani for resistance against heat and humidity and for a birefringent layer optically uniform over an entire surface that maintains its uniformity even under changes of temperature and humidity as noted in Hani.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeanne A. Di Grazio whose telephone number is (703)305-7009. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Robert can be reached on (703) 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-8741 for regular communications and (703)746-8741 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Jeanne Andrea Di Grazio

Robert Kim, SPE

JDG February 27, 2003

TO ANTON INER